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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,204	04/13/2004	Andy Kenowski	470037.90718	4051

26710 7590 09/20/2004

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EXAMINER

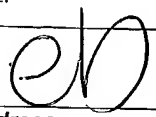
MCALEAVEY, ANDREW JAMES

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/823,204	KENOWSKI ET AL.	
	Examiner	Art Unit	
Andrew McAleavey	1746		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>13 April 2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it does not set forth the subject matter claimed in this application. Instead, the instant abstract is directed entirely to method aspects of Applicants' invention, and makes no mention of the apparatus claimed in this application. Correction is required. See MPEP § 608.01(b).
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The Examiner notes that the claims are directed to an apparatus.

The following title is suggested: "Monitoring Device for Operating Clean-In-Place System."

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in paragraphs [0022] – [0034] of the instant specification (hereinafter Applicants' admitted prior art or "AAPA") in view of Franks et al., U.S. Patent No. 6,161,558 (hereinafter "Franks").

In a discussion of the conventional clean-in-place system depicted in prior art-labeled Figure 1 of the instant specification, the specification discloses and admits to be

prior art a system having first and second tanks, each tank with a supply valve and a return valve. Supply and return conduits are in communication with each tank, and a programmable logic controller controls the flow of fluids from and into each tank. One tank is disclosed as being an acid tank, while the other is a caustic (alkaline) fluid tank. Paragraph [0029] discloses that pH or conductivity sensors in communication with the controller are positioned in the caustic tank to monitor the pH of the alkaline solution, and the controller is responsive to the sensors in that it initiates delivery of alkaline cleaning solution from the caustic pump to the caustic tank based on pH.

AAPA differs from claims 1-6 in that it does not explicitly disclose that pH or conductivity sensors are positioned in the return valves for the respective tanks.

However, Franks discloses an apparatus for cleaning in place with two tanks, one tank (112; Figure 5) containing an alkaline solution and the other tank (114; Figure 5) containing an acidic solution. In the apparatus of Franks, sensing probes (100; Figure 3) in communication with a controller are provided within a return manifold (90; Figure 3). See column 6, lines 14-18. The Examiner interprets the return manifold as the "return conduit" recited in the claims.

With respect to claim 5, Franks discloses a water tank that feeds into the clean-in-place system (40; see column 5, lines 13-29). At column 6, lines 14-18, Franks discloses "monitor[ing] such parameters as temperature and chemical concentration." As would be well understood by one of ordinary skill in the art, "chemical concentration" is commonly measured by detecting the conductivity of a chemical or solution of chemicals.

It would have been obvious to modify the apparatus of AAPA to include pH sensors in the return conduits of the tanks in order to monitor and control the performance of the system more effectively, as is explicitly suggested by Franks.

Claims 1, 2, and 6 recite that the controller “execut[es] a stored program to” perform a number of steps. This language is indicative of a computer program, and thus has been considered and construed in view of the guidelines provided in MPEP § 2106. In view of those guidelines, as will be explained below, this language has been given little patentable weight.

Inter alia, MPEP § 2106 IV.B.1(a) (second column, 8th ed., R2, p. 2100-13) instructs that “[w]hen a computer program is recited in conjunction with a physical structure...Office personnel should treat the claim as a product claim.” Thus, claims 1, 2, and 6 are clearly apparatus (i.e., structural) claims. Apparatus claims must be structurally distinguishable from the prior art. See MPEP § 2114, citing, *inter alia*, *In re Swineheart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971), *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429 (Fed. Cir. 1997) and *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 15 USPQ2d 1525 (Fed. Cir. 1990).

In this case, the steps performed by the controller are not deemed to differentiate the controller recited in the claims from the controller disclosed by Franks or, for that matter, the controller disclosed in AAPA. It is the Examiner’s position that both controllers are capable of performing the recited functions.

This claim interpretation is rooted in and supported by the language of the claims, which do not require that the program be encoded in or otherwise specifically

contained by the controller. As the claims are presently drafted, the controller could be read as a microprocessor or other general-purpose computing device, and the program could be stored on any medium, including a separate medium not directly or specifically associated with the controller. Thus, no structural difference is seen between the recited controller and those of the prior art.

Accordingly, the combination of AAPA and Franks renders claims 1-6 obvious.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew McAleavey whose telephone number is 571-272-0542. The examiner can normally be reached on Monday through Friday, 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AM
9/17/04

MICHAEL BARR
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Michael Barr", with a long horizontal flourish extending to the right.